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AUTHOR	Liu, Sandra
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ABSTRACT

A rapidly changing environment, marked by decreased government financial support and increased competition within the university sector, means that institutions of higher education in Hong Kong must become more entrepreneurial and customer-focused. This paper proposes a model for managing contemporary universities that examines the relationships between users and suppliers of higher education and emphasizes the need for a new university dynamic that supports substantive change. Following an introduction and a summary of the evolution of higher education in Hong Kong, the paper proposes a taxonomy for managing contemporary universities by integrating undergraduate, graduate, and professional school communities to formulate an institutional mission and direction. The taxonomy presented consists of four quadrants identifying suppliers and users from the educational and business sectors. Next, institutional entrepreneurship for university management is discussed, advocating the adoption of a corporate venturing, or intrapreneurship, model that emphasizes the role of academic staff in capitalizing on market trends, research opportunities, and their own expertise to develop new courses and programs and the fundamental role of senior management to effectively reorient the institution to participate in the lifelong learning paradigm. Finally, policy implications are presented. Contains 20 references. (TGI)

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Sandra Liu

In: Lifelong Learning: Policies, Practices, and Programs

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Trends in Hong Kong University Management: Towards a Lifelong Learning Paradigm

by Sandra Liu

To survive in a rapidly changing environment marked by decreased financial support from the government and increased competition within the university sector, institutions of higher education in Hong Kong must become more entrepreneurial and customer focused. The alternative, to remain elitist, removed from and blind to market forces, is a prescription for isolation and, eventually, obsolescence. Institutions that identify market forces, seek out competitive advantages, and respond to customer needs will join the lifelong learning paradigm - the archetype for all education and training in the future. This paper proposes a model that examines the relationships between the users and suppliers of higher education, and a perspective for appreciating the need for a new university dynamic that supports substantive change. The goal is for universities to be pivotal players in the lifelong learning context, while the reward is institutional survival.

INTRODUCTION

An education system may be viewed from a macro perspective "as adapting to social requirements and responding to the demands of society not of individuals" (Archer, 1984, p.2). It has also been described as having the function of contributing to the economic, political, and other legitimate needs of the State in order to support and preserve the process, context, and legitimacy of the capital accumulation process and its continued expansion (Dale, 1989). As higher education institutions produce graduates for the labour market, in turn contributing to social and economic development, one could argue that the changes in higher education systems witnessed during recent decades flow from this context. Clearly, the evolution of higher education systems in East Asia, in response to the dynamic forces generated by burgeoning economies, is linked to the increased demand for higher learning. In the new order of things the traditional model of "finishing schools" has been challenged by the more typically American "service station" notion of a university for recurrent education users (Duke, 1992).

Contemporary universities (both old and newly designated ones) have more functions to fulfil than was once the case. In Hong Kong, for instance, changes resulting from new mass education policies have forced elite universities, such as the University of Hong Kong, to become part of an integrated higher education system, despite the Hong Kong Funding Council's previous efforts to segregate them by

granting more privileged treatment. They are no longer separated, at least operationally or functionally, from the "diversities and pluralities of outside society" (Lovatt, 1987, p. 30; Niblett, 1974), as much as they used to be or as much as they would like to be. In essence, rapid change driven by societal needs, including government pressures and market forces, is affecting the fundamental organization and operation of universities in Hong Kong and elsewhere in East Asia.

EVOLUTION OF HIGHER EDUCATION IN HONG KONG

The purpose of higher education in Hong Kong is to respond to labour force demands in order to support smooth social and economic growth in the territory. Industry exerts its force via the government, which in turn regulates directions and operations of institutions by means of the funding mechanism. As a result of its rapid socioeconomic development and its importance as an international financial and business centre, Hong Kong has witnessed massive, increasing demand for professional level human resource expertise since the 1980s. In October of 1989, the government announced plans for the rapid expansion of higher education in the 1990s. Since then the number of universities has increased from two to seven, and each university has a growing student body drawn from the adult population, particularly in the continuing education area. Universities are under pressure to re-evaluate their internal operations as well as to position themselves strategically in this competitive and ever more complex community of higher learning.

In October of 1996, the University Grants Committee (UGC) of Hong Kong announced a cut in its 1998-2001 three-year higher education budget. As a result, universities in Hong Kong will now be compelled to develop entrepreneurial activities and attitudes, operational efficiencies and effective management strategies as a result of the explicit and directive funding mechanisms. Universities are expected to be high quality and cost-effective institutions providing for the advancement of knowledge, the pursuit of scholarship, and, at a more pragmatic level, the education of students in terms of their vocational careers both now and in the future. As a result, the universities play a key and vital role in responding to market forces, thereby facilitating the social and economic development of the territory. It is also important to note that the student population has expanded from the traditional 18-22 year age group to include many more mature students (mostly part-time) from all walks of life, most of whom have personal and specific goals related to career advancement or self development. With these pressures, academic institutions are being forced to become more customer oriented, responding to both the funding council, which wields the stick of deciding which seats to purchase, and to the changing demands of students and employers.

As July 1997 looms on the horizon, Hong Kong's role in overall Chinese economic development becomes more pertinent and both government and industry have expressed concern over the evolution of the educational system. The University and Polytechnics Grants Committee (UPGC) in its Interim Report (1993, back cover) noted that it will "encourage and reward excellence in each of the institution's activities, including teaching, research, and other scholarly activity in accordance with its specified role and mission." Although there were no explicit

guidelines regarding how scholarly activities are being evaluated and rewarded in terms of funding, the signal is clear that higher education institutions need to develop new orientations on their own initiative in order to survive in an increasingly competitive higher education community. In fact, unless the universities become a major provider within the developing lifelong learning culture, they run the risk of becoming marginalized and isolated. No longer can Hong Kong universities, even the most senior among them, afford to operate without concern for the major changes occurring in society and the higher education community specifically within Hong Kong.

While the government is proposing decentralization of accountability down to the cost centres within each institution, the monitoring of performance and allocation of resources have actually become more centralized at the institutional level. Universities as a whole enjoy more autonomy in determining their own destinies, and, in turn, this requires university leaders to apply closer examination and evaluation of performance at the department and program levels. Further, rather than relying on traditional development models, universities are being encouraged to decentralize elements of their decision making hierarchy by allowing academics to develop new programs based on environmental scanning and situational analyses in accordance with their expertise. This will allow each institution to capitalize on its unique competitive advantages, and ultimately these same institutions will evolve differently while responding to specific needs and niches, the result being a more diverse set of institutions. Visionary administrators are being called upon to rekindle, revitalize and bring new methods and creative approaches to the universities' traditional responsibility for producing educated citizens by providing forums for liberal thinking and supporting the quest for knowledge and truth. This transformation in the perceived role of higher education and university management demands a new paradigm, one that allows evolving university institutions to reconsider their position within the community, the relationship they have with their students, and their role in the lifelong learning paradigm.

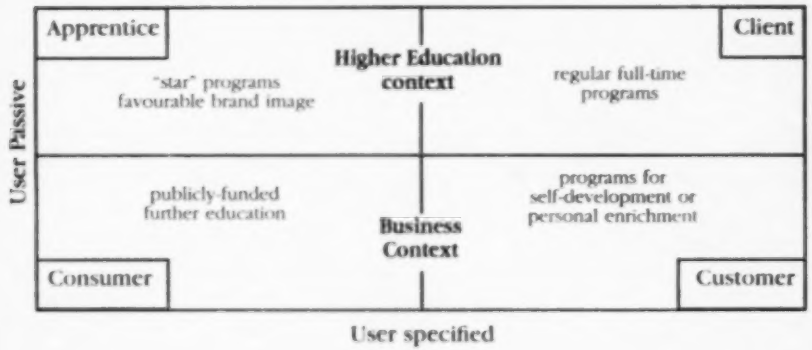
A TAXONOMY FOR MANAGING A CONTEMPORARY UNIVERSITY

Higher education around the world has experienced rapid growth, particularly in South East Asia. At the same time, strong pressures include increasing costs and cutbacks from traditional funding sources. In spite of these, educational institutions have become large enterprises, often with thousands of employees, huge physical plants, and diverse missions. Increasingly, universities are compelled to consider market oriented, business strategies, at least in terms of student recruitment and fund-raising activities (Wheale, 19991; Conway, Mackay & Yorke, 1994). Other scholars in the field of higher education marketing have gone further, stressing the importance for these institutions to be responsive to market demands and more specifically to actively pursue strategies that create high levels of customer satisfaction (Doyle, 1976). With regard to market demands, it is important to consider that marketing includes educating and motivating prospects' (potential clients) latent needs, or marketing a set of institutional expectations in the direction of the prospects (Litten, 1980). In effect, although universities are service providers, they

also have significant responsibilities for providing leadership and direction within the field of higher education, including the setting of standards relating to qualifications, research and scholarship.

As universities grapple to develop distinctive and marketable identities, a taxonomy representing the relationship between suppliers and users becomes a useful device; a choice construct for higher education and for integrating both mainstream higher education and lifelong learning in institutional strategic planning (see Figure 1). Different from Kerr's (1982) idea of a multiversity which integrates several communities with varying missions and objectives along a continuum, this taxonomy attempts to integrate the communities of the undergraduate, the graduate, the professional schools, and so forth, in order to formulate an institutional mission and direction. The implication is that the strategic objective for each quadrant would vary according to the relationship between the user and the supplier.

Figure 1: A Taxonomy of Supplier/User Relationships in Higher Education



A traditional mainstream full-time post-secondary educational institution targets mainly 18-22 year old high school graduates. These students may be categorized as either "Apprentices" or "Clients" depending on their bargaining power. A student's academic record and the demands of the particular program that the student is interested in are the main leverages. In general, "star" programs, or institutions with distinguished reputations, are positioned within the upper left-hand quadrant. Programs and institutions in this quadrant are highly selective when screening their "Apprentices". Faculty members representing departments in these institutions are given greater autonomy when developing courses and/or academic programs. By comparison, institutions having only programs that compete for the same student groups are positioned in the "Client" quadrant. The interaction between institutions in this quadrant, and their students, is primarily one of competition in an effort to attract the best qualified "prospects". These two "supplier-specified" quadrants function in the context of traditional higher education; however, their success is inextricably linked with the level of service, and hence positioning, they provide. The

marketing framework for the organization therefore shifts from external to one that is internal, and includes internal marketing as well as post-purchase customer services, as is the case in business.

Socioeconomic opportunities and advancements related to education and training have, within recent decades, prompted increasing demand for lifelong learning opportunities as these relate to university training. Innovative institutions have sought ways to widen access for mature students, most of whom are interested in part-time programs. This shifts the transaction to the "user-specified" lower quadrants within the matrix, an environment which more closely resembles the pure business context. The model makes a distinction between "Consumers" who enrol in publicly funded programs and "Customers" who personally pay the full costs of the educational product. Many programs offered in Continuing Education are planned and designed solely on the basis of market demand. Administratively, these are self-sufficient. In the lower right-hand side of the quadrant, students are true "Customers", paying the full costs of the educational product and in a position of relative strength in so far as determining whether or not to buy the program. Factors influencing the purchase decision may include perceived relevancy as well as the quality of the program and its delivery characteristics. In the lower left-hand side of the quadrant students enrol in publicly supported programs that incorporate flexible modes of learning (evening, weekends and so forth) with the ultimate goal of attaining formal certification. As noted earlier, these students, once enroled, are described as "Consumers". Institutions offering these programs, which include the M.B.A. and M.Phil. degree programs, are increasingly providing additional educational opportunities and services to students in order to compete with other institutions offering similar programs. The goal is to recruit the best qualified students. Also in this quadrant are students from open learning institutions, which are, in general, subsidized by government funding. As the allocation of resources to higher education institutions in Hong Kong is becoming more centralized, both at the regulatory level and institutional levels, the relationship between the user and the supplier tends to become more complex. The concurrent issue of need versus the ability to pay makes it important for universities to view the Funding Council and research councils as part of the customer mix.

INSTITUTIONAL ENTREPRENEURSHIP FOR UNIVERSITY MANAGEMENT

As universities struggle to adapt to the changes in higher education, including more stringent control by the Funding Council and increasing competition from within the higher education community, many are increasingly compelled to develop and deliver a set of services which gives them a niche or competitive edge in the marketplace. In turn, the various elements of their "educational products" are influenced by: a) faculty members' active involvement in the curricular design process and in research projects as driven by their understanding of the competitive market, b) selective student participation, both as clients and products, and c) the quality and type of services developed and delivered by administration and support staff. This is a collegial model where academic operations, including curricular design, course/program planning and research endeavours, are initiated and to a certain

extent controlled by individual faculties. This model facilitates "corporate venturing" (see Figure 2), or what others have referred to as intrapreneurship (see Jones & Butler, 1992; Wonders & Gyure, 1991), and is identified primarily with individual entrepreneurship in the institution. In effect, academic staff in the new order are expected to capitalize on market trends, research opportunities and their own expertise to develop new courses and program.

Figure 2: Layers of Institutional Entrepreneurship* for Higher Education Institutions

* Three types of corporate entrepreneurship according to the Stopford and Baden-Fullen (1994) framework.

** Major players for outer layers include the ones in the inner layer.

Moreover, the recent trends of increasing regulatory and institutional control (for example by evaluating performance indicators for funding purposes), along with greater public accountability as it relates to higher education, have further encouraged the process of corporate venturing and entrepreneurship among faculty members. Many Hong Kong institutions have research centres headed by faculty members that are designed for external research and/or consultancy projects. Although the professional bureaucratic structure (see Mintzberg, 1979) existing in higher education institutions is arguably an inflexible structure for innovation (see Maassen and Potman, 1990), the university multi-divisional structure does have value in ensuring strong functional control and supervision, and is appropriate for raising visibility with regard to individual performance and accountability.

Organizational renewal describes the "expansive notion of a complete business altering its resource pattern to achieve better and sustainable overall economic performance" (Jones and Butler, 1992, p. 522). In the higher education institutional context, sustainable renewal requires greater involvement and more creative leadership from senior management. Also, Kogan (1995) suggests an appropriate differentiation and connection between bureaucratic levels when institutions are faced with changes in the tasks and the relative power of academics and administrators. This is even more important in light of the recent changes in the higher education environment and the reduced funding from traditional sources. Senior management should, therefore, be treated as separate from the basic administrative structure because of their distinctive responsibilities and authority. Senior management, depending on the organizational structure of individual institutions, includes at least the Vice Chancellor, Pro Vice Chancellors, Academic Deans, Registrar, and Financial Comptroller. These administrators sit on all committees that are vital for policy making and strategy formulation, including the Senate, Council, and Steering Committee or Senior Executive Committee.

As regulatory and institutional controls are becoming more exacting due to changes in governmental funding policies, the terms of reference for senior managers have become similar to those of managers in the traditional bureaucratic model. Senior management controls resources and functions as a gate-keeper in terms of interpreting the funding policies and, in turn, formulates strategies and directions for the institution. This business-like, manager-oriented organization should underpin the drive for inculcating effective intrapreneurship. Coexistence of the bureaucratic and collegial models in universities, however, tends to create tension between senior management and faculty members. In order for institutional renewal to survive the developmental period, it is important for senior managers to acquire transformational leadership skills, characterized by a long-term perspective, and to view intra- and extra-organizational factors from a holistic orientation (Dubinsky, Yammarino, Jolson & Spangler, 1995). Leaders of this sort know how to develop a vision of what the organization can be (often being entrepreneurs themselves), are able to mobilize the organization to accept change and become more productive, and can institutionalize changes that will last over time. Alternatively, and differing from this traditional individual-centred view of leadership, Bensimon and Neumann (1993) suggest that leadership in universities should be considered as a collective, where interactivity is the most important element. They view the senior management team as a culture which stresses processes - including ways of coming together, growing together, working together, and also coming apart - rather than stressing the product.

When senior management embraces "frame-breaking change" for the institution in an effort to find and deploy new combinations of resources as a means for developing positional leadership among rival institutions, tensions may arise between the senior management and the general administrative staff who, in a broad sense, see their responsibility as one of safeguarding standards, governmental policies and institutional regulations in order to ensure continuity of institutional operations and preserve existing systems. The internal marketing process then becomes critical at

the operational level for building a shared institutional value system based on senior management's vision and, eventually, of forming a fully developed, intrapreneurial, institutional culture. Part of this will involve devising appropriate management techniques, personnel policies, internal training policies, and planning and control procedures. In addition, a marketing plan and a marketing control system are essential in order for institutions to operate with greater focus and to utilize resources more effectively. Overall, the role of senior management in terms of effectively re-orienting the institution to participate in the lifelong learning paradigm is fundamental.

POLICY IMPLICATIONS

The Hong Kong Government founded the first university in the territory in 1911 with the specific purpose of establishing a university of "Western learning", not only for the Colony, but also for the Empire (Mellor, 1980). The Chinese University of Hong Kong was founded in 1956 and then, following the example of the British University Grants Committee, the Government established the University Grants Committee (UGC) in 1965 (later to become the University and Polytechnics Grant Committee, and then to revert again to the University Grants Committee in 1994) to provide advice regarding the budget for higher education and the allocation of funds among the institutions by means of three-year block grants. However, it wasn't until the publication of the 1978 White Paper that the government became actively and directly involved in developing higher education in Hong Kong. In 1979, the government appointed the Advisory Committee on Diversification (ACD) to evaluate the higher education system. The findings of this Committee highlighted the insufficient production of highly-skilled professionally trained personnel, particularly in technical fields, that would be required to meet both student and labour market demands. The Committee recommended that technical institutes be given greater flexibility to respond to the needs of industry and that Hong Kong's human resource base be upgraded through the systematic development of part-time adult learning opportunities. This was the first time that the traditional university sector had been directly linked through policy applications with the fledgling notion of lifelong learning. Although extramural education had been instituted in universities since the late 1950s, it had always been a second class addition well isolated from mainstream university education.

As a response to expected competition from universities in Southern China after July 1997, the University and Polytechnic Grants Committee believes that higher education institutions in Hong Kong must "incorporate centres of excellence having local, regional and international functions. They should provide very high quality bilingual manpower for both Hong Kong and the mainland and should act as points of reference, particularly in Business and Social Studies and in innovative science and technology, for development in Southern China and more widely" (1993, p.7). Further, the Committee argued that the government should urgently formulate policies to facilitate these processes. Although there have not been explicit policy guidelines on the holistic development of higher learning, the same policy paper stipulates the importance of each university being able to develop new orientations or specializations based on its own initiatives. Assuming this takes place, and it is

difficult to imagine what forces would prevent it from occurring, what will develop sooner rather than later, impelled for the most part by market forces, will be a market-influenced and institutionally-shaped system of universities and university products within a larger lifelong learning system.

The taxonomy described earlier in this paper permits universities to evaluate their academic programs and target markets in order to strategically plan their evaluation and respond to competitive forces within the scope of labour market developments. Recent behaviour exhibited by the University of Hong Kong and others illustrates how the universities are responding within this framework of forces. Since the 1994 transition of polytechnics and colleges to university status, the traditional universities in Hong Kong, and the Hong Kong University in particular, have encountered greater competition for research funds. In addition, the University and Polytechnics Grants Committee has since 1994 devolved the authority for academic planning to the institutional level. It subsidizes universities with HK$50,000 per student, and expects institutions to balance their budgets with other revenue generating activities. The University of Hong Kong, as a result, has been compelled to become more market-oriented in the planning and delivery of its academic programs. As the contemporary higher education market is becoming more focused on broad lifelong learning opportunities, there are stronger market demands for in-service educational programs, and the University has breached the divide between the traditional liberal and the vocational faculties by replacing the Department of Extramural Studies (DES) with a new School of Professional and Continuing Education (SPACE). This permitted the University to expand its activities in the developing areas of part-time, adult higher education by creating closer links to the "main stream" university faculties. For example, a Bachelor of Science in Nursing Studies is now offered by SPACE in collaboration with the Faculty of Medicine. This program targets local in-service nurses with the objective of further developing their professional competencies and skills within the context of the Hong Kong health care system.

In another example, the City University of Hong Kong now offers a Master's of Manufacturing Engineering and Management degree, and has gone so far as to change the name of the Manufacturing and Engineering Department to the Manufacturing Engineering and Engineering Management Department. This is in direct response to the rapid economic restructuring taking place in Hong Kong, and the need for engineering graduates to have management expertise for the work many of them do in the Peoples' Republic of China. In 1997-98, the department began offering a similar degree at the bachelor's level. In addition, the Faculty of Science at the University of Hong Kong has launched a Computational Mathematics and Operations Research theme focusing on the practical aspects of transportation, construction, production management, foreign exchange, investment and the service sectors. It draws on interdisciplinary contributions from the departments of Statistics, Management and Computer Science. These programs and others are in direct response to market demands for human resource expertise that combines technical and management proficiencies.

Although many newly-designated universities claim to position themselves strate-

gically as teaching universities, much of their planning and strategy is in fact aimed at obtaining public research funding. They have, as a result, had to work very hard at improving their research record within a short time span. These institutions are caught in a dilemma. On the one hand, if they don't concentrate on strengthening their research capabilities, they won't get research funding. On the other hand, if they dedicate themselves to research activities, they will send confusing signals to the marketplace and may compromise their competitive advantage in teaching and vocational training. Established universities clearly face increased competition for research funds as the newly-designated universities now compete in this sector. An additional constraint relates to the fact that public funding for higher education will continue to contract in Hong Kong for the three-year period, 1998-2001. As a result, all the universities are looking for opportunities to generate income through the development of new training programs, often in collaboration with industry. The proposed framework of institutional entrepreneurship described above provides a holistic approach for understanding and examining these activities. By necessity and design, higher education is joining the lifelong learning paradigm.

The bureaucratic collegium of academic operations, resulting from the recent trend of increasing regulatory and institutional control, facilitates intrapreneurship. This, in turn, will develop into an organizational renewal, and eventually form frame-breaking changes. Each stage is dominated by one type of entrepreneurship and encompasses earlier ones, similar to expanding concentric circles of activity. Each circle requires time to build the entrepreneurial based activities and to allow systems and attitudes to evolve and change in fundamental ways. When strategically planning for the future in a volatile and transient environment like that found in Hong Kong, institutions need to go beyond conventional annual budgetary planning. A beginning may involve encouraging intrapreneurship among academic staff. Beyond that, institutional renewal and eventual frame-breaking changes require leadership which is able to embrace and integrate positional and strategic marketing, to develop a vision of what the institution can be, to mobilize the institution to accept change and become productive, and to institutionalize changes in order to create a new university culture. Most importantly, universities must realize that they need to actively become part of the broad lifelong learning paradigm, one that educates and re-tools the population in anticipation of a rapidly evolving society and economy.

REFERENCES

Archer, M. S. (1984). *Social origins of educational systems*. London: SAGE.

Bensimon, E. M. & Neumann, A. (1993). *Redesigning collegiate leadership: Teams and teamwork in higher education*. Baltimore, MD: The John Hopkins University Press.

Conway, T., Mackay, S., & Yorke, D. (1994). Strategic planning in higher education: Who are the customers? *International Journal of Educational Management* 8(6), 29-36.

Dale, R. (1989). *The state and education policy*. Milton Keynes: Open University Press.

Doyle, P. (1976, January). *Marketing and the responsive university*. Inaugural Lecture delivered at University of Bradford, England.

Dubinsky, A. J., Yammarino, F. J., Jolson, M. A. & Spangler, W. D. (1995, Spring). Transformational leadership: An initial investigation in sales management. *Journal of Personal Selling and Sales Management XV*(2), 17-29.

Duke, C. (1992). *The learning university: Towards a new paradigm?* Buckingham: SRHE and Open University Press.

Jones, G. R. & Butler, J. E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. *Journal of Management 18*(4), 733-749.

Kogan, M. (1995, November). *Conditions favouring academic productivity*. Paper presented at the IMHE Seminar on Human Resources and Staff Development, Hong Kong Baptist University, Hong Kong.

Litten, L. H. (1980). Marketing higher education: Benefits and risks for the American academic system. *Journal of Higher Education 51*(1), 40-59.

Lovatt, W. D. (1987). Tertiary education in Hong Kong: Can we learn from the English experience? In Hong Kong Baptist College Student Union (Ed.), *Overview of post-secondary education in Hong Kong* (pp. 29-32). Hong Kong: King-Lin Publishing Company.

Kerr, C. (1982). *The uses of the university* (3rd ed.). Cambridge: Harvard University Press.

Maassen, P. A. M. & Potman, H. P. (1990). Strategic decision making in higher education: An analysis of the new planning system in Dutch higher education. *Higher Education 20*, 393-410.

Mellor, B. (1980). *The University of Hong Kong: An informal history* (Vol. 1). Hong Kong: Hong Kong University Press.

Mintzberg, H. (1979). *The structuring of organizations*. Englewood Cliffs: Prentice Hall.

Niblett, W. R. (1974). *Universities between two worlds*. London: University of London Press.

Stopford, J. M. & Baden-Fuller, C. W. F. (1994). Creating corporate entrepreneurship. *Strategic Management Journal 15*, 521-536.

University and Polytechnic Grants Committee (UPGC) of Hong Kong. (1993). *Higher education 1991-2001: An interim report*. Hong Kong: Author.

Wheale, J. (1991). *Generating income for educational institutions: A business planning approach*. London: Kogan Page.

Wonder, T. J. & Gyure, J. F. (1991). Opportunistic marketing in higher education. In T. J. Hayes (Ed.), *New strategies in higher education marketing* (pp. 1 - 16). Binghamton, NY: The Haworth Press.